

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

SEMCON IP INC.,

Plaintiff,

v.

LOUIS VUITTON NORTH AMERICA,
INC.,

Defendant.

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Case No. 2:19-cv-00122-JRG
(LEAD CASE)

JURY TRIAL DEMANDED

SEMCON IP INC.,

Plaintiff,

v.

TCT MOBILE INTERNATIONAL
LIMITED, ET AL.,

Defendants.

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Case No. 2:18-cv-00194-JRG
(CONSOLIDATED CASE)

JURY TRIAL DEMANDED

**PLAINTIFF SEMCON IP INC.'S
OPENING CLAIM CONSTRUCTION BRIEF**

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Pursuant to P.R. 4-5(a) and the Court's Docket Control Order of November 4, 2019 (Dkt. 27), Plaintiff Semcon IP, Inc. ("Semcon") hereby submits its Opening Claim Construction Brief. The asserted patents are U.S. Patent Nos. 7,100,061 (the "'061 Patent," Ex. A), 7,596,708 (the "'708 Patent," Ex. B), 8,566,627 (the "'627 Patent," Ex. C), and 8,806,247 (the "'247 Patent," Ex. D), (together, the "Asserted Patents").

I. CLAIM CONSTRUCTION STANDARD OF REVIEW

A. GOVERNING LAW

The governing legal standards relating to claim construction are described in the Court's opinion in *AGIS Software Dev., LLC v. Huawei Device USA Inc.*, No. 2:17-CV-513-JRG, 2018 WL 4908169, at *3-5 (E.D. Tex., Oct. 10, 2018), and are hereby incorporated by reference. *See also Seoul Semiconductor Co. Ltd. v. Nichia Corp.*, 596 F. Supp. 2d 1005 (E.D. Tex. 2009).

B. LEVEL OF ORDINARY SKILL IN THE ART

The "Field of the Invention" is described generally as related to the field of semiconductor devices. The detailed descriptions of the inventions and the claims of the Asserted Patents draw on a combination of skills from the semiconductor arts. Semcon submits that a person of ordinary skill in the art ("POSITA") covered by the Asserted Patents would have a bachelor's degree in electrical or computer engineering with one to two years of experience in the field of computer processor operations and/or design and digital data processing systems with a focus on power utilization and management. Ex. E, Declaration of Joseph C. McAlexander III Regarding Proposed Constructions and Definiteness of the Asserted Claims of U.S. Patent Nos. 7,100,061, 7,596,708, 8,566,627, and 8,806,247, ¶ 26. Extensive experience and technical training may substitute for educational requirements, while advanced education, such as a relevant MS or Ph.D. degree, might substitute for experience. *Id.*

C. PRIOR LITIGATION

This Court has previously construed the claims of the Asserted Patents in *Semcon IP Inc. v. Huawei Device USA Inc.*, No. 2:16-cv-0437-JRG-RSP (the “*Huawei Case*”) (Dkt. 172 (the “*Huawei CC Order*”)); *Semcon IP Inc. v. Amazon.com, Inc.*, No. 2:18-cv-00192-JRG-RSP (the “*Amazon Case*”) (Dkt. 59 (the “*Amazon CC Order*”)); *Semcon IP Inc. v. Asustek Computer, Inc.*, No. 2:18-cv-00193-JRG-RSP (the “*Asustek Case*”) (Dkt. 68 (the “*Asustek CC Order*”)); and *Semcon IP Inc. v. Kyocera Corp.*, No. 2:18-cv-00197-JRG-RSP (the “*Kyocera Case*”) (Dkt. 65 (the “*Kyocera CC Order*”). Defendants Louis Vuitton North America, Inc. (“LVNA”) and TCT Mobile International Limited (“TCT”) (collectively, “Defendants”) now seek to re-litigate certain constructions that this Court has decided, or to which the parties have previously agreed, in an attempt to narrow the scope of the claims and create non-infringement arguments.

Rather than permit Defendants to rewrite the claims of the Asserted Patents, this Court should defer to its prior claim constructions. Prior claim construction proceedings involving the same Asserted Patents are “entitled to reasoned deference under the broad principals of *stare decisis* and the goals articulated by the Supreme Court in *Markman*, even though *stare decisis* may not be applicable *per se*.” *Maurice Mitchell Innovations, LP v. Intel Corp.*, No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex., Jun. 21, 2006) (Davis, J.). The Court’s prior constructions are entitled to substantial weight, and the Court should decline to depart from those constructions because, as shown below, Defendants have not demonstrated any need to do so. *See TQP Dev., LLC v. Intuit Inc.*, No. 2:12-CV-180, 2014 WL 2810016, at *6 (E.D. Tex., June 20, 2014) (Bryson, J.) (“[P]revious claim constructions in cases involving the same patent are entitled to substantial weight, and the Court has determined that it will not depart from those constructions absent a strong reason for doing so.”); *see also Finisar Corp. v. DirecTV Grp.*,

Inc., 523 F.3d 1323, 1329 (Fed. Cir. 2008) (noting “the importance of uniformity in the treatment of a given patent”) (quoting *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996)).

II. PATENT BACKGROUND AND TECHNOLOGY

The '061 Patent issued on August 29, 2006 from Application No. 09/484,516 (the “'516 Application”) filed on January 18, 2000. On August 4, 2009, an *Inter Partes* Reexamination Certificate issued that resulted in the confirmation or issuance of 57 claims in the '061 Patent. The '708 Patent issued on September 29, 2009 from Application No. 11/411,309 (the “'309 Application”), a continuation of the '516 Application, filed on April 25, 2006. The '627 Patent issued on October 22, 2013 from Application No. 12/502,685 (the “'685 Application”), a continuation of the '309 Application. The '247 Patent issued on August 12, 2014 from Application No. 13/725,901 (the “'901 Application”), a continuation of the '685 Application. The Asserted Patents are directed to systems and methods for adjusting the power consumed by a computer processor based on the operating conditions of the processor, such as the processor's temperature, the time spent in various states of operation, etc. *See* Ex. A, '061 Patent, 5:21-45, 2:16-24. Control software is used to monitor operating conditions and determine whether the frequency and voltage of the processor should be raised or lowered to a level sufficient to meet processing needs without wasting power. *Id.*, 5:40-53.

III. DISPUTED TERMS

- A. “independently of instructions to be executed by the processor / independently of instructions to be executed by the central processor” (Claims 1, 10, 15, 23, 39, and 56 of the '061 Patent) and “determination made independently of instructions to be executed by the processor / determining step made independently of instructions to be executed by the central processor” (Claims 1, 10, 15, 23, 39, and 56 of the '061 Patent) (No. 1)**

Semcon's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning.	<p>“without consideration of impending processor usage”</p> <p>“determination made without consideration of impending processor usage”</p>

The terms “independently of instructions to be executed by the processor,” “independently of instructions to be executed by the central processor,” “determination made independently of instructions to be executed by the processor,” and “determining step made independently of instructions to be executed by the central processor” require no further construction. Because Defendants propose the same construction for these terms, Plaintiff addresses them together. A POSITA would understand these claim terms according to their plain and ordinary meaning.

A POSITA would have understood that “impending processor usage” differs in scope from “instructions to be executed by the processor.” This is a clear attempt to replace a specific term “instructions to be executed” with a broader term “usage” in order to introduce ambiguity into the claims and expand the scope of prior art. A POSITA would have understood “processor usage” connotes all processor operations and processor states. Ex. E, Declaration of Joseph C. McAlexander III Regarding Proposed Constructions and Definiteness of the Asserted Claims of U.S. Patent Nos. 7,100,061, 7,596,708, 8,566,627, and 8,806,247 at ¶ 34 (“McAlexander Dec.”). However, this claim limitation is specifically directed to instructions to be executed by the processor. *Id.*

Accordingly, these claim terms should be construed by their plain and ordinary meaning and Defendants’ proposed construction introducing additional limitations should be rejected.

B. “operating conditions of the central processor” (Claim 56 of the ’061 Patent) (No. 2)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	“operating conditions internal to the central processor”

Plaintiff proposes that this term be assigned its plain and ordinary meaning. Defendants seek to add the limitation “internal to the central processor.” Defendants’ proposed construction is not supported by the claims or the intrinsic evidence and accordingly should be rejected.

First, Defendants’ construction limits the “operating conditions” to only those “internal to the central processor” based on examples in embodiments of the specification. *See* Ex. G, Declaration of David Hansquine at ¶ 71 (“Hansquine Dec.”). However, the operating conditions are not limited to those that are listed as exemplary. *See Amazon* CC Order at 32-33 (“The Asserted Patents’ list of operating conditions . . . is not exhaustive.”). This was further confirmed by the Court in the *Kyocera* Case. *See Kyocera* CC Order at 18. The Court in the *Amazon* Case noted that “[o]ther exemplary condition monitoring includes ‘detecting other operations of the system including commands to be executed from which a particular type of operation to be executed may be determined.’” *Amazon* CC Order at 33.

The Court in *Kyocera* further held that the construction of “operation conditions” does not necessarily exclude “instructions to be executed by the processor.” *Kyocera* CC Order at 18. Based on this holding, “operating conditions” cannot logically be limited to those internal to the central processor. *See Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1336 (Fed. Cir. 2001) (holding it is illogical to construe “material object” in a claim that required information be reproduced on the material object as being the information itself); *Dayco Prods., Inc. v. Total Containment, Inc.*, 258 F.3d 1317, 1324 (Fed. Cir. 2001) (“If an argument offered in support of a particular claim construction is so convoluted and artificial that it would not be

apparent to a skilled artisan reading the patent and the prosecution history, the argument is simply unhelpful to the performance of our task.”). Accordingly, the Court held that the “operating conditions” terms were to be construed according to their plain and ordinary meaning.

Defendants cannot point to any definition by the patentee or unambiguous disavowal of claim scope to support this limitation. *See Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“We depart from the plain and ordinary meaning of claim terms based on the specification in only two instances: lexicography and disavowal.”). Accordingly, these terms should be assigned their plain and ordinary meaning.

C. “control software dedicated to a central processor” (Claim 10 of the ’061 Patent) (No. 3)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	“control software exclusively for controlling the central processor”

The claim term “control software dedicated to a central processor” appears in claim 10 of the ’061 Patent. The meaning of this term is clear on its face to a POSITA. The additional limitation proposed by Defendants which seeks to define “dedicated to a central processor” as “exclusively for controlling the central processor” should be rejected as an attempt to limit the control software to controlling the central processor, but none of the intrinsic or extrinsic evidence cited by Defendants supports this proposition.

The specification discloses that the “control software monitors various conditions of the processor which relate to power expenditure by the processor [and] [t]hese conditions may include any of those described above including the present frequency and voltage of operation, the temperature, and the amount of time the processor spends in one of what may be a number of idle states in which various components of the system are quiescent.” Ex. A, ’061 Patent at 5:21-

29; Ex. E, McAlexander Dec. at ¶ 38. By including “exclusively for controlling the central processor,” Defendants effectively seek to exclude any other operations, including monitoring various conditions, despite the disclosure in the specification. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583-84 (Fed. Cir. 1996) (holding that an interpretation of a claim that reads out an embodiment is “rarely, if ever, correct and would require highly persuasive evidentiary support, which is wholly absent in this case”). A POSITA would not understand “control software dedicated to a central processor” to mean that the control software is limited to “exclusively” control the central processor. Ex. E, McAlexander Dec. at ¶ 38.

Thus, a POSITA would be able to ascertain “control software dedicated to a central processor” by its plain and ordinary meaning.

D. “operating characteristic(s)” (Claim 10 of the ’061 Patent; Claims 2, 3, 8, 9, 33, 52, 53, 55, and 56 of the ’708 Patent) (No. 4)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning	“parameter(s) that control operation of the processor”

The meaning of the “operating characteristic(s)” terms is clear on their face to a POSITA and would not require construction. Defendants’ proposed construction, “parameter(s) that control operation of the processor” impermissibly narrows the scope of this term and is not supported by the citations to Defendants’ intrinsic and extrinsic evidence.

The claim terms are described throughout the specification and are not limited to control parameters. Ex. E, McAlexander Dec. at ¶ 40. For example, claim 56 of the ’708 Patent recites a “thermal condition operating characteristic” which is not a parameter that controls operation of the processor, but is a characteristic related to a condition of the processor. *Id.* at ¶ 41.

Defendants’ expert, Mr. Hansquine, cites to the specification which states that some of the steps

for controlling power include “utilizing the control software to measure the operating characteristics of a processor of the computer, determining when the operating characteristics of the central processor are significantly different than required by the operations being conducted, and changing the operating characteristics of the central processor to a level commensurate with the operations being conducted.” Ex. A, ’061 Patent at 2:16-24. Defendants’ construction would limit this claim term to disclosures in the specification. *See Superguide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”) (citation omitted). The Court in *Amazon* and *Kyocera* addressed these terms together with the “operating conditions.” The Court in *Amazon* noted that “[o]ther exemplary condition monitoring includes ‘detecting other operations of the system including commands to be executed from which a particular type of operation to be executed may be determined.’” *Amazon* CC Order at 33. Accordingly, “operating characteristic(s)” are not limited to “parameters that control operation of the processor.” *See Vitronics Corp.* 90 F.3d at 1583-84 (holding that an interpretation of a claim that reads out an embodiment is “rarely, if ever, correct and would require highly persuasive evidentiary support, which is wholly absent in this case”).

Again, the Court in the *Kyocera* Case further held that the construction of “operation characteristic(s)” does not necessarily exclude “instructions to be executed by the processor.” *Kyocera* CC Order at 18. Based on this holding, “operating characteristic(s)” cannot logically be limited to merely “parameters that control operation of the processor.” *See Interactive Gift Exp., Inc.*, 256 F.3d at 1336 (holding it is illogical to construe “material object” in a claim that required information be reproduced on the material object as being the information itself); *Dayco Prods., Inc.*, 258 F.3d at 1324 (“If an argument offered in support of a particular claim construction is so

convoluted and artificial that it would not be apparent to a skilled artisan reading the patent and the prosecution history, the argument is simply unhelpful to the performance of our task.”).

Defendants’ proposed construction introduces ambiguity which would confuse rather than clarify the scope of the claims. *See Contentguard Holdings, Inc. v. Amazon.com, Inc.*, No. 2:13-CV-1112-JRG, 2015 WL 8073722, *78 (E.D. Tex. Dec. 4, 2015) (“Defendants’ proposal of ‘user-susceptible’ would also introduce a potentially subjective element that would tend to confuse rather than clarify the scope of the claims.”).

Accordingly, these claim terms should be construed by their plain and ordinary meaning.

E. “sleep state” (Claims 31, 46, and 51 of the ’061 Patent) (No. 5)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	Indefinite.

The term “sleep state” is not indefinite because a POSITA would have understood the scope of the invention, including this term, with reasonable certainty. To prevail on this term, Defendants must show that the claims fail to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017) (citing *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014)). Further, “[i]ndefiniteness must be proven by clear and convincing evidence.” *Id.* Because Defendants cannot meet this high burden, the Court should reject their indefiniteness argument. Instead, Defendants have identified a factual issue that depends on processor-specific characteristics.

The claims and the specification describe an example of a type of “sleep state” as a “deep sleep state.” Ex. A, ’061 Patent at 5:21-45; Ex. E, McAlexander Dec. at ¶ 45. Based on the specification, a POSITA would understand that the deep sleep state is an example or

embodiment of the sleep state. Ex. E, ¶ 45. Mr. McAlexander, Plaintiff’s claim construction expert, opines that a POSITA would also understand that sleep states are “processor specific and ascertainable by reviewing a processor’s technical data sheets.” *Id.* (“In other words, a POSITA would understand that what constitutes a sleep state is a factual inquiry based on a processor’s specification.”). In other words, a “sleep state” is determinable by looking up “sleep state” information in technical data sheets.

Accordingly, this claim term is sufficiently definite and should be construed by its plain and ordinary meaning.

F. “Claim 1 (order of steps)” (Claim 1 of the ’061 Patent) and “Claim 1 (order of steps)” (Claim 1 of the ’247 Patent) (No. 6)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	<p>The sequence of steps as follows:</p> <ol style="list-style-type: none"> 1. Determine a reduced maximum allowable power consumption 2. The computer processor uses the maximum allowable power consumption computed from Step 1 to determine a maximum frequency 3. The computer processor uses the maximum frequency from Step 2 to determine a minimum voltage 4. The computer processor changes its frequency and voltage to the values of maximum frequency and minimum voltage computed respectively in Steps 2 and 3

Defendants propose an order of steps of the limitations of claim 1 of the ’061 Patent and claim 1 of the ’247 Patent. Because Defendants propose identical constructions for both claims, Plaintiff addresses both together.

Generally, the order of steps of a claimed method will not limit the claim. *See Interactive Gift Exp., Inc.*, 256 F.3d at 1342 (“Unless the steps of a method actually recite an order, the steps are not ordinarily construed to require one.”). The Court in *Interactive Gift* sets forth a two-part test for determining if the steps of a method claim that do not otherwise recite an order, must nonetheless be performed in the order written. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed. Cir. 2003). First, “we look to the claim language to determine if, as a matter of logic or grammar, they must be performed in the order written. *Id.* If the claim language is not written to be performed in an order, “we next look to the rest of the specification to determine whether it ‘directly or implicitly requires such a narrow construction’.” *Id.* at 1370 (citations omitted). If not, it is not required that the steps be performed in the sequence with which they are written.

First, the claim language does not indicate that the steps must be performed in the order written. *See Interactive Gift*, 256 F.3d at 1343. Next, the rest of the specification does not directly or implicitly require such a narrow construction. *See Altiris, Inc.*, 318 F.3d 1363, 1370 (“Nowhere, however, is there any statement that this order is important, any disclaimer of any other order of steps, or any prosecution history indicating a surrender of any other order of steps.”). Rather, the specification discloses in one embodiment that some of Defendants’ proposed steps, may be performed in multiple steps. *See, e.g.*, Ex. A, ’061 Patent at 6:16-24 (“It should be noted that the voltage may be increased in a single step . . . Alternatively, the voltage may be increased in a series of small steps which would not have this effect.”). Further, “if the control software was not increasing, but rather decreasing frequency of operation at the previous step, then the original voltage level is not changed at this time.” *Id.* at 6:30-32.

Further, Defendants’ construction of the limitations found in claim 1 is not merely a recitation of the limitations in a particular order, but introduces additional limitations not found in the claims and specification. Defendants’ “rewording” of the claim steps includes the addition of limitations that are not supported. For example, the first step of Defendants’ construction requires determining “a reduced maximum allowable power consumption.” In support, Defendants’ cite to the specification which, contrary to Defendants’ construction, states “[t]he detection of such operating characteristics therefore may indicate that the frequency and voltage of operation should be reduced.” However, the following paragraph of the specification states that “[o]n the other hand, it may be found that the processor is functioning at a reduced frequency and voltage and that a series commands have been furnished to be executed by the processor which require *greater* processing power.” *Id.* at 5:27-50. By proposing a construction of the order of steps, it appears Defendants are attempting to backdoor additional limitations into the claim.

Accordingly, Defendants’ proposed construction should be rejected and this claim term should be construed by its plain and ordinary meaning.

G. “determining an allowable reduced power consumption level / determining a level of permitted power consumption” (Claim 39 of the 061 Patent and Claim 1 of the ’247 Patent) (No. 7)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	Indefinite.

The claim terms “determining an allowable reduced power consumption level” and “determining a level of permitted power consumption” are sufficiently definite and do not require any further construction by the Court. In order to prevail on indefiniteness, Defendants must show that the claims fail to “inform those skilled in the art about the scope of the invention

with reasonable certainty.” *Sonix Tech. Co.*, 844 F.3d at 1377. Further, “[i]ndefiniteness must be proven by clear and convincing evidence.” *Id.* As Defendants cannot meet this high burden, the Court should reject Defendants’ indefiniteness argument.

Defendants’ expert, Mr. Hansquine, concedes that processor specifications may instruct how to determine a permitted power level, he restricts his analysis to how a POSITA would interpret these claim terms absent a processor specification that does not specify a peak power consumption. Ex. G, Hansquine Dec. at ¶¶ 81-82. However, this Court in the *Huawei* Case held that the meaning of these terms is reasonably certain. *Huawei* CC Order at 22. The Court stated that “whether a particular consumption level is ‘permitted’ or ‘allowable’ depends on whether the operating temperature is at or below some predetermined ‘safe’ level.” *Id.* The Court further stated that “whether a power level is determined based on operating conditions, settings, and limits is objectively determinable.” *Id.* at 23. Accordingly, the Court found that Defendants failed to render any claim indefinite. *Id.*

Moreover, a POSITA would understand how to determine levels for other embodiments or levels used to populate a look-up table, such as those in a processor specification. Ex. E, McAlexander Dec. at ¶ 50. Based on the disclosure in the specification stating that “[i]t is desirable to operate the processor at the lowest possible voltage at a frequency that provides the computing power desired by the user at any given moment,” (Ex. A, ’061 Patent at 1:48-50), a POSITA would understand and be able to determine the frequency and voltage pairs by varying the small number of voltage settings and frequencies determined for a test case. *Id.* Accordingly, a POSITA would understand to run the same tests based on the temperature of the processor and collect such pairs of frequency and voltages based on the temperature. *Id.*

The specification also teaches the equation $P=CV^2f$ to determine the maximum allowable power consumption level, where C is the active switching capacitance, V is the supply voltage, and f is the frequency of operation. Ex. A, '061 Patent at 1:42-45; Ex. E, McAlexander Dec. at ¶ 51. A POSITA would understand how to determine the maximum allowable power, the maximum frequency and lowest voltage needed to support that maximum allowable power, and the maximum frequency and lowest voltage needed to support that maximum frequency from the set of allowable frequency and voltage settings. Ex. E, McAlexander Dec. at ¶ 51.

Since a POSITA would understand these terms to be sufficiently definite, they should be given their plain and ordinary meaning.

H. “a normal frequency and voltage” (Claim 67 of the '061 Patent) (No. 8)

Semcon's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning.	“the most common frequency and voltage”

This claim term does not require construction, as a person of ordinary skill in the art would have reasonable certainty about the scope of the term from its context in the claims and specification.

Defendants' proposed construction deviates from the claims, specification, and the ordinary and customary meaning of the terms. Specifically, Defendants add ambiguity to the claims by replacing “normal” with an unclaimed and undefined term. Defendants submit two dictionary definitions in support of their proposed construction. According to Defendants, “normal mode” is defined as “[t]he expected or usual operating conditions,” and “operated in its usual or most common manner.” Ex. G, Hansquine Dec. at ¶ 86. Defendants' construction reads out an embodiment of the specification, where it states that “[i]f the processor is spending more than a preselected increment of its operation in these states while operating at a normal

frequency and voltage, then power is being wasted. The detection of such operating characteristics therefore may indicate that the frequency and voltage of operation should be reduced.” Ex. A, ’061 Patent at 5:40-45; Ex. E, McAlexander at ¶ 56. However, the “normal frequency and voltage” could differ from what is the “most common frequency and voltage” depending on the specific processor. Accordingly, Defendants’ construction would contradict the specification and rather than clarifying the term, introduces ambiguity and unduly limits the scope of this claim term. *See Vitronics Corp.*, 90 F.3d at 1583-84 (holding that an interpretation of a claim that reads out an embodiment is “rarely, if ever, correct and would require highly persuasive evidentiary support, which is wholly absent in this case”).

Further, a POSITA would understand that the normal frequency and voltage are determined by processor manufacturers and are usually listed on product datasheets. Ex. E, McAlexander Dec. at ¶ 56. A POSITA would understand a normal frequency and voltage to be factual inquiries based on a processor’s specifications. *Id.*

This claim term does not require any further construction and should be construed according to its plain and ordinary meaning.

- I. **“changing an operating frequency at which said processor is operated . . . while execution of instructions by said processor is stopped” (Claims 1 and 51 of the ’708 Patent) and “changing an operating frequency . . . while execution of instructions . . . is stopped / changing a frequency of operation . . . while execution of instructions is stopped / adjusting said programmable frequency generator while instruction execution is stopped to change the frequency / while instruction execution is stopped, adjusting said programmable frequency generator to change the frequency / changes the . . . frequency of operation . . . while execution of instructions . . . is stopped / changes the . . . frequency of operation . . . while execution of instructions . . . is stopped / while instruction execution is disabled . . . adjusting said programmable frequency generator to change the frequency” (Claims 1, 7, 12, 13, 20, 23, 26, 33, 36, 39, 51, 55, and 59 of the ’708 Patent) (No. 9)**

Semcon's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning.	"changing the frequency while the processor receives a stopped clock signal"

Defendants group together seven different terms and propose the same construction of "changing the frequency while the processor receives a stopped clock signal." In contrast, Plaintiff maintains that this term would be understood by a POSITA such that no construction is needed.

The construction advanced by Defendants is similar to those considered by the Court in the *Amazon* Case. In *Amazon*, the Court found that stopping execution of instructions does not necessarily require stopping the processor clock. The Court held that "under the plain meaning of the claims, stopping execution of the instructions is distinct from stopping the clock." *Amazon* CC Order at 24. Defendants attempt to circumvent this Court's prior construction by reading out the "execution of instructions" language and similar claim language and replacing it with "while the processor receives a stopped clock signal." However, the Court found in the *Amazon* Case that "stopping execution of the instructions is distinct from stopping the clock." *Id.* at 24-25 ("While the embodiments described in the patents do in fact stop the clock for the frequency change, this is not enough to read a stopping-the-clock limitation into all claims directed to changing the frequency—especially considering that some claims express stopping the clock and others do not.")).

Further, Defendants' construction would limit frequency changes to the specific period of receiving a "stopped clock signal." Ex. E, '061 Patent at ¶ 62. A POSITA would understand that the specification discloses a processor may be stopped where the control software was not increasing, but decreasing frequency of operation at the previous step, and where the control

software then goes through steps in which various operations of the processor are prepared for shutdown so that the system clocks can be changed. Ex. B, '708 Patent at 6:24-29; Ex. E, McAlexander Dec. at ¶ 62. The specification also discloses that the clock is stopped once a “change frequency command and values are received.” Ex. B, '708 Patent at 4:62-5:1; Ex. E, McAlexander Dec. at ¶ 62. Accordingly, a POSITA would not have understood that the invention is limited to the “stopped clock signal” limitation or that a change frequency command or value means a “stopped clock signal.” Thus, Defendants’ introduction of unnecessary limitations is unsupported by the intrinsic evidence and Defendants’ construction should be rejected.

J. “said change in operating conditions” (Claims 12, 18, and 19 of the '627 Patent) (No. 10)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	Indefinite.

Defendant groups together ten different terms that recite “monitoring” and proposes the same construction of “continually measuring the condition of a parameter.” In contrast, Plaintiff maintains that this term would be understood by a POSITA such that no construction is needed.

In order to prevail on indefiniteness, Defendants must show that the claims fail to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Sonix Tech. Co.*, 844 F.3d at 1377. Further, “[i]ndefiniteness must be proven by clear and convincing evidence.” *Id.* A claim is only indefinite if it is “not amenable to construction or [is] insolubly ambiguous.” *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1352 (Fed. Cir. 2009). As Defendants cannot meet this high burden, the Court should reject Defendants’ indefiniteness argument.

Defendants read the term “said change in operating conditions” in isolation; however, this claim term has an antecedent basis in the independent and dependent claims from which they depend. *See, e.g.*, Ex. C, ’627 Patent, Claim 17 (The method of claim 16, further comprising: adjusting said first clock signal by a first value to furnish said second clock signal at said second frequency to said processing unit; and adjusting said first clock signal by a second value to furnish said third clock signal at said third frequency to said second component concurrent with furnishing of said second clock signal to said processing unit, wherein said second frequency is different from said third frequency.”). Accordingly, the claim term “said change in operating conditions” characterizes the claimed operating conditions. *See Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283 (Fed. Cir. 2015) (“While the parties focus on the words ‘being provided to,’ the surrounding language of the claim is instructive. . . . It is, instead, a phrase that characterizes the claimed pre-processing parameters. The use of the term ‘said’ indicates that this portion of the claim limitation is a reference back to the previously claimed ‘pre-processing parameters.’”) (internal citations omitted).

Accordingly, the claim term “said change in operating conditions” does not require further construction and should be given its plain and ordinary meaning.

K. “sprint” (Claim 15 of the ’627 Patent) (No. 11)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	Indefinite.

The meaning of this term is sufficiently definite and clear on its face to a POSITA. In order to prevail on indefiniteness, Defendants must show that the claims fail to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Sonix Tech. Co.*, 844 F.3d at 1377. Further, “[i]ndefiniteness must be proven by clear and convincing evidence.”

Id. As Defendants cannot meet this high burden, the Court should reject Defendants' indefiniteness argument.

Defendants' expert, Mr. Hansquine, states that "sprints" could refer to "simply powering on a device, performing an operation at any frequency and voltage, then powering it off." Ex. G, Hansquine Dec. at ¶ 113. However, Mr. Hansquine reads this sentence from the specification in isolation. The full paragraph of the specification indicates that in one embodiment, it may be found that certain characteristics may indicate that "it may be desirable to increase the voltage and frequency of operation in order to handle these commands for a period less than would raise operating temperatures beyond a safe level." Ex. C, '627 Patent at 7:37-46. This may lead the control software to "compute higher frequency and voltage values and a temperature . . . in order to cause the hardware to move to this higher frequency state of operation." *Id.* at 7:46-50. This "sprint" would have the effect of "allowing a processor which nominally runs at a lower frequency to attain operational rates reached by more powerful processors during those times when such rates are advantageous." *Id.* at 7:53-57. Accordingly, when read in the context of the specification, a POSITA would find this claim term is sufficiently clear. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) ("Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.").

Defendants also rely on three technical and one non-technical dictionary to establish that "sprint" is indefinite. However, reliance on extrinsic evidence is unnecessary where the term is sufficiently definite in light of the claims and specification. *See Phillips*, 415 F.3d 1321 ("The main problem with elevating the dictionary to such prominence is that it focuses the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of

the patent. Properly viewed, the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent. Yet heavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.”).

Accordingly, this claim term should be construed in light of the specification and given its plain and ordinary meaning.

L. “not based [upon/on] instructions to be executed by the processing device” (Claims 1, 10, and 17 of the ’247 Patent) (No. 12)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	“without consideration of impending processor usage”

The terms “not based [upon/on] instructions to be executed by the processing device” do not require construction and should be construed according to their plain and ordinary meaning.

Like the aforementioned “independently of instructions to be executed by the processor” and “determination made independently of instructions to be executed by the processor” terms, Defendants propose an additional limitation “without consideration of impending processor usage.” Defendants cite to the same prosecution history in support of its construction. Ex. G, Hansquine Dec. at ¶¶ 122-129. Again, a similar construction was considered and rejected by the Examiner in the Reexamination of 95/000,243, where the Examiner rejected the addition of the “without analysis of a task to be performed” language to the claims on 35 U.S.C. § 112 grounds because the specification lacks support for the language. Ex. E, McAlexander Dec. at ¶ 33; Ex. F, Inter Partes Reexamination Fil History of U.S. Patent No. 7,100,061, Patent Owner’s Reply to Action Closing Prosecution in Inter Partes Reexamination Pursuant to 37 C.F.R. § 1.951(a), dated September 3, 2008 at 14. Defendants’ construction “without consideration of impending

processor usage” is not supported by the claims or the specification.

The Examiner rejected Patent Owner’s amendment to add the language “without analysis of a task to be performed,” but nonetheless Defendants’ expert states that “a person of ordinary skill in the art would interpret the Applicants’ / Patent Owner’s statements to mean their claims, both independent and dependent, amended by this limitation were intended to exclude from consideration any impending processor usage.” Ex. G, Hansquine Dec. at ¶ 128. However, the prosecution history is of limited usefulness here where the Examiner explicitly rejected the proposed amendments. *See Phillips*, 415 F.3d at 1317 (“Yet because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of the negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.”).

Further, Defendants’ proposed construction conflicts with parties’ agreed construction for processing device. *See* Dkt. 41-1 at 1 (stating that parties’ agreed-upon construction for “processing device” is “computing portion of CPU”).

Accordingly, this claim term should be construed by its plain and ordinary meaning.

M. “nominal operating frequency / nominal frequency of operation” (Claims 27, 39, 45, 54, 58, and 62 of the ’708 Patent) (No. 14)

Semcon’s Proposed Construction	Defendants’ Proposed Construction
Plain and ordinary meaning.	Indefinite

Defendants contend that the terms “nominal operating frequency” and “nominal frequency of operation” are indefinite while Plaintiff maintains that a POSITA would understand this claim term and no construction is necessary. In order to prevail on indefiniteness, Defendants must show that the claims fail to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Sonix Tech. Co.*, 844 F.3d at 1377. Further,

“[i]ndefiniteness must be proven by clear and convincing evidence.” *Id.* As Defendants cannot meet this high burden, the Court should reject Defendants’ indefiniteness argument.

Based on the disclosure of the claims and specification, a POSITA would understand the scope of these terms. For example, the claim discloses that “said adjusting comprising setting said second frequency of said processing unit to a value higher than said *nominal operating frequency*.” Ex. B, ’708 Patent at 10:46-48. The specification also discloses that “a processor which *nominally* runs at a lower frequency [] attain[s] operational rates reached by more powerful processors during those times when such rates are advantageous.” Ex. B, ’708 Patent at 7:48-52; Ex. E, McAlexander Dec. at ¶ 75. The specification also states “for example, [] the processor is running at what might be termed its normal model of operation at a core frequency of 400 MHz and a voltage of 1.3 volts. . . .” Ex. A, ’061 Patent at 5:29-35; Ex. E, McAlexander Dec. at ¶ 75. The specification describes the normal frequency, given operating conditions by stating that “[i]f the processor is spending more than a preselected increment of its operation in these states while operating at normal frequency and voltage, then power is being wasted.” Ex. A, ’061 Patent at 5:40-45. Accordingly, when read in the context of the specification, a POSITA would find this claim term is sufficiently clear. *See Phillips* 415 F.3d at 1313 (“Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.”).

A POSITA would also understand that the nominal operating frequency and voltage are determined by processor manufacturers and accordingly, usually listed on product data sheets. Ex. E, McAlexander Dec. at ¶ 75. A POSITA would understand that using the processor’s specification, a nominal operating frequency can be determined. *Id.* This is consistent with

extrinsic evidence from the National Institute of Standards and Technology (NIST) which defines “Nominal Frequency” as “an ideal frequency with zero uncertainty” and “labeled on an oscillator’s output.” *Id.* Accordingly, the “nominal frequency” would be understood as the manufacturer’s default frequency or normal frequency. *Id.* A POSITA would know to consult resource, such as NIST, if there were any uncertainties regarding the meaning of this term. *Id.*

A POSITA would understand the scope of “nominal operating frequency” and “nominal frequency of operation” with reasonable certainty and accordingly, these claim terms are definite and do not require further construction.

IV. CONCLUSION

For the foregoing reasons, Semcon respectfully requests that the Court adopt its proposed constructions for the disputed terms and phrases of the ’061 Patent, the ’708 Patent, the ’627 Patent, and the ’247 Patent.

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***ATTORNEYS FOR PLAINTIFF
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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on February 12, 2020.

/s/ Alfred R. Fabricant
Alfred R. Fabricant